

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT BY APPLICANT(S)

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Docket No.: 6495-0108WOUS Applicant: Peter Gravesen, et al. Title: Tactile Sensor Element and

Sensor Array

U.S. Serial No.: 10/538,260 U.S. Filing Date: Group Art Unit: 06/09/2005

2855

U.S. PATENT DOCUMENTS

Examiner's <u>Initials</u>	Patent Number	Patent <u>Date</u>	<u>Name</u>	Class <u>Subclass</u>
/OD/	3,753,294	08/21/1973	Attali et al.	33/133
/OD/	4,266,263	05/05/1981	Haberl et al.	•
	4,386,386	05/31/1983	Akita	361/283
/OD/	4,494,409	01/22/1985	Kondo et al.	
10D1	4,654,546	03/31/1987	Kirjavainen	307/400
/OD/ _	4,836,033	06/06/1989	Seitz	73/862.04
/OD/	5,060,527	10/29/1991	Burgess	73/862.68
-/OD/	5,090,248	02/25/1992	Cimmino et	al. 73/780
/OD/	5,115,680	05/26/1992	Lew	73/763
/OD/	5,173,162	12/22/1992	Hagimura et	t al. 204/299
/OD/	5,255,972	10/26/1993	Shirasu	60/528
/OD/	5,410,210	04/25/1995	Sato et al.	310/363
/OD/	5,425,275	06/20/1995	Lockshaw	73/775
/OD/	5,755,090	05/26/1998	Hu	60/39.091
/OD/	5,841,143	11/24/1998	Tuma et al.	250/458.1
/OD/	5,977,685	11/02/1999	Kurita et al.	•
/OD/	6,210,514 B1	04/03/2001	Cheung et al	
IODI	6,282,956 B1	09/04/2001	Okada	73/504.12
/OD/	6,343,129 B1	01/29/2002	Pelrine et al.	•
/OD/	6,376,971 B1	04/23/2002	Pelrine et al.	•
<u>/OD/</u>	6,543,110 B1	04/08/2003	Pelrine et al.	•
/OD/	6,545,384 B1	04/08/2003	Pelrine et al.	
/OD/	6,581,481 B1	06/24/2003	Perusek	73/862.337
700/	6,583,533 B2	06/24/2003	Pelrine et al.	
/OD/	6,586,859 B2	07/01/2003	Kornbluh et	al. 310/309
/OD/	6,628,040 B2	09/30/2003	Pelrine et al.	
/OD/	6,662,658 B2	12/16/2003	Foote	73/514.29
/OD/	6,664,718 B2	12/16/2003	Pelrine et al.	
_/QD/	6,707,236 B2	03/16/2004	Pelrine et al.	
/OD/	6,768,246 B2	07/27/2004	Pelrine et al.	
/OD/	6,781,284 B1	08/24/2004	Pelrine et al.	
/OD/	6,806,621 B2	10/19/2004	Heim et al.	310/328
/OD/	6,809,462 B2	10/26/2004	Pelrine et al.	
/OD/	6,812,624 B1	11/02/2004	Pei et al.	310/800
/QD/	6,876,135 B2	04/05/2005	Pelrine et al.	
/OD/	6,882,086 B2	04/19/2005	Kornbluh et	al. 310/328



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Examiner's Initials /OD/ /OD/ /OD/ /OD/ /OD/ /OD/ /OD/	Patent Number 6,891,317 B2 6,911,764 B2 6,940,211 B2 7,034,432 B1 7,049,732 B2 7,064,472 B2	Patent Date 05/10/2005 06/28/2005 09/06/2005 04/25/2006 05/23/2006 06/20/2006	Class Name Subclass Pei et al. 310/800 Pelrine et al. 310/328 Pelrine et al. 310/330 Pelrine et al. 310/309 Pei et al. 310/800 Pelrine et al. 310/324
	U.S. Pate	ent Publications:	
/OD/ /OD/ /OD/ /OD/ /OD/ /OD/ /OD/ /OD/	US 2001/0035723 A1 US 2001/0026165 A1 US 2002/0008445 A1 US 2002/0050768 A1 US 2002/0130673 A1 US 2002/0175594 A1 US 2002/0175598 A1 US 2002/0185937 A1 US 2003/006669 A1 US 2003/0066741 A1 US 2003/0067245 A1 US 2003/0141787 A1 US 2004/0008853 A1 *US 2004/0012301 A1 US 2004/0124738 A1 US 2004/0124738 A1 US 2004/0232807 A1 US 2004/0232807 A1 US 2004/0263028 A1 US 2006/015893 A1 US 2006/0113880 A1 US 2006/0113880 A1 US 2006/0119225 A1 US 2006/0158065 A1	11/01/2001 10/04/2001 01/24/2002 05/02/2002 09/19/2002 11/28/2002 11/28/2002 11/28/2002 11/28/2002 01/09/2003 04/10/2003 04/10/2003 04/10/2003 07/31/2003 07/31/2003 11/20/2003 01/15/2004 01/22/2004 07/01/2004 11/04/2004 11/04/2004 11/04/2004 11/25/2004 07/21/2005 06/01/2006 06/08/2006 07/20/2006	Pelrine et al. 318/116 Pelrine et al. 324/750 Pelrine et al. 310/330 Beck et al. 310/334 Pelrine et al. 324/727 Kornbluh et al. 310/317 Heim et al. 310/328 Heim et al. 310/339 Pei et al. 310/309 Burgess et al. 200/61.43 Pelrine et al. 310/311 Pelrine et al. 310/365 Pelrine et al. 310/365 Pelrine et al. 310/309 Pelrine et al. 381/191 Benslimane et al. 310/307 Rosenthal et al. 310/307 Rosenthal et al. 310/307 Pelrine et al. 310/800 Pei et al. 310/800 Pei et al. 310/800 Pei et al. 310/800 Pei et al. 310/800 Heim et al. 310/339 Pelrine et al. 310/339 Pelrine et al. 310/328

FOREIGN PATENT DOCUMENTS

Examiner's <u>Initials</u>	Document <u>Number</u>	<u>Date</u>	Country	Translation <u>Yes</u> <u>No</u>
/OD/ /OD/ /OD/	WO 96/34701 WO 97/27822 WO 00/66970	11/07/1996 08/07/1997 11/09/2000	PCT PCT	X X X
70D/	WO 01/06575 A1 WO 01/06579 A2	01/25/2001 01/25/2001	PCT PCT	X X

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FOREIGN FATENT DOCUMENTS (Con't)

Examiner's	Document			Translation
Initials	<u>Number</u>	Date_	Country	<u>Yes No</u>
/OD/	WO 01/059852 A3	08/16/2001	PCT	\overline{x}
/OD/	WO 01/58973 A2	08/16/2001	PCT	X
/OD/	WO 01/63738 A2	08/30/2001	PCT	X
<u>/OD/</u>	WO 01/065615 A3	09/07/2001	PCT -	· X
/OD/	WO 02/37660 A1	05/10/2002	PCT	Abstract
/OD/	WO 2004/079832 A2	09/16/2004	PCT	. X
7007	WO 2005/081676 A2	09/09/2005	PCT	X
/OD/	WO 2005/079187 A2	09/01/2005	PCT	X
/OD/	0 387 180 A1	09/12/1990	EP	X
/OD/	0 855 307 B1	03/26/2003	EP	X
<u>/OD/</u>	30 06 620 A1	09/03/1981	DE	Abstract
/OD/	30 23 218 A1	02/25/1982	DE	Abstract
/OD/	198 26 391 A1	12/23/1999	DE .	Abstract
/OD/	100 54 247 A1	05/23/2000	DЕ	*See U.S. Equiv.
/OD/	1-273372	11/01/1989	JP	Abstract
/OD/	2 309 833	12/30/1976	FR	Abstract
/QD/	2 793 937 A1	11/24/2000	FR	Abstract

OTHER DOCUMENTS

Examiner	' S
<u>Initials</u>	

/OD/	Copy of publication "High-field electrostriction of elastomeric
polymer diel	ctrics for actuation" by Roy Kornbluh, et al., SRI International; SPIE
Vol. 3669, pg	149-161; March 1999.

/OD/ Copy of publication "Micro-Electro-Mechanical Systems (MEMS) – 2000" by R. Trujillo, et al.; Presented at 2000 ASME International Mechanical Engineering Congress and Exposition, November 5-10, 2000; Orlando, FL; pgs. 709-716.

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